September 19, 2005

RE: Emergency Declaration and Plan for Evaluating Underground Storage Tank Sites Impacted by Hurricane Katrina

To Whom It May Concern:

As a member of the Underground Storage Tank (UST) community in the area affected by Hurricane Katrina, you are an integral part of the recovery process. While many of you have sustained damage from the storm, the Louisiana Department of Environmental Quality (DEQ) realizes that the speedy return of your facilities to normal operation is crucial to the recovery effort. Citizens must be able to purchase gasoline in order to begin the rebuilding process. In pursuit of its goal of safely and speedily returning USTs to operation, the DEQ has issued two documents, attached to this correspondence, a portion of an Emergency Declaration issued by the Secretary pertaining to USTs and a "Plan for Evaluating Underground Storage Tank Sites Impacted by Hurricane Katrina" (plan).

The Emergency Declaration suspends provisions contained in the UST regulations which owners/operators may not have been able to comply with due to the storm and its subsequent flooding. It also provides for continuing coverage by the Motor Fuels Underground Storage Tank Trust Fund (MFUSTTF), with no additional deductibles that might have attached to a claim for reimbursement should the owner/operator not have been able to comply with the regulations due to storm conditions. The plan contains the expedited process that tank owners/operators must follow before bringing a UST system back on line. The processes provide the steps for owners and operators to safely bring the UST on line without having to wait until precision tank and line tightness tests can be performed.

Please review the attached documents and proceed as required. DEQ stands ready to assist you in your quest to resume normal operations.

Sincerely yours,

Wilbert Jordan
Assistant Secretary
Office of Environmental Assessment

Enclosures

EMERGENCY DECLARATION

7. Underground Storage Tanks

Before placing any hurricane impacted Underground Storage Tank (UST) system back in operation, and no later than 90 days after hurricane related conditions permit, the owner and/or operator shall perform an emergency evaluation of the UST system. The evaluation shall consist of, at a minimum, a general inspection of the UST system, followed by performing the start up protocol contained in the department's document entitled "Plan For Evaluating Underground Storage Tank Sites Impacted by Hurricane Katrina" dated September 19, 2005. UST systems that have been damaged or sustained a release are required to be repaired or replaced and have precision tank and line tightness tests, leak detection system tests, and corrosion control systems up and running before receiving fuel.

During the time that the UST system is not accessible due to conditions resulting from the hurricane, the owner/operator of the UST system is relieved of the requirements for release detection, corrosion protection, and inventory control. Each owner/operator shall report any suspected UST releases to the Department within seven (7) days of gaining knowledge of the suspected release, unless an emergency condition makes it impossible for the owner/operator to do so, in which case the owner/operator shall report the suspected release to the Department as soon as he/she is able. All recordkeeping requirements for inoperable systems are suspended during the time of this emergency declaration. During the time of this declaration, in the areas affected by the hurricane, non-compliance with release detection, corrosion protection, and inventory control for UST owners and operators will not constitute non-compliance for purposes of the deductibles enumerated in La. R.S. 30:2195.10.

PLAN FOR EVALUATING UNDERGROUND STORAGE TANK SITES IMPACTED BY HURRICANE KATRINA

Prepared by

Louisiana Department of Environmental Quality
Environmental Technology Division
And
Remediation Services Division
Office of Environmental Assessment
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

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PROBLEM DEFINITION

On August 29, 2005, Hurricane Katrina struck Louisiana causing widespread damage within a 10 parish region surrounding and within the greater New Orleans area. The specific effects of Hurricane Katrina were unforeseen and uncontrollable; and emergency conditions (threats to human health and the environment) persist. Underground Storage Tank (UST) sites have been impacted by flood waters which will require actions be taken to place these sites back into operation. Steps necessary to place the site into operation are being outlined to ensure that new releases do not occur and if releases are identified in this process that they are properly addressed. The focus of this effort will be to place these sites into operation while ensuring protection of human health and the environment.

BACKGROUND

Flooding and damage related to Hurricane Katrina has raised many issues regarding Underground Storage Tank site status. Damage to UST systems as well as remediation systems is expected. The impact of this damage must be evaluated to determine what steps are necessary to place these sites back into service.

In the six parishes that suffered the most severe damage due to the storm (Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Washington parishes) approximately 848 active UST sites are known to be present with approximately 2543 underground tanks. A number of these sites have either been damaged or flooded.

Damage that occurs to UST systems generally results from: the buoying up of tanks which are partially full or empty, water entering the tanks and displacing product, failure of underground piping as a result of stresses induced by groundwater pressures or debris, and damage to electrical systems from extended contact with water. Additionally, another route of infiltration exists if the level of floodwaters exceeds the top of the vent lines. Regulated UST's which are weighted down with fuel or anchored by other means (deadmen or attached to an underlying pad) and have properly installed and tightened filler caps and vapor recovery port caps should sustain little impact, even after being submerged for days.

Tanks in which fill caps are not tightened will fill with water and then spill product, some of which may percolate into shallow soil. Empty or near-empty tanks will float up, destroying overlying concrete/asphalt and distribution lines, also spilling

product. In these situations, it is expected that the entire UST system would require replacement.

Presently, the extent and magnitude of damage to UST systems themselves and to the shallow subsurface environment as a result of Hurricane Katrina is unknown. At this time the primary objective is to put these systems back into proper service to meet the fuel supply need of initial and subsequent response efforts. Later, as time and resources permit, assessment and remediation of any environmental impacts will take place.

UNDERGROUND STORAGE TANK EVALUATION

Underground Storage Tank sites flooded by the hurricane must be evaluated to determine response actions necessary to place these UST facilities back into service and protect human health and the environment. New product should not be placed in the tanks if there are indications that the integrity of the tank has been comprised when performing the activities outlined below.

GENERAL INFORMATION

UST Owners/Operators will be responsible for evaluating underground storage tank systems to determine if they are suitable for receiving product. Flooded systems that are **determined to be suitable for receiving product** may be put back into service and should have an integrity test performed as soon as contractors and services become available to perform the testing and no later than six months after product was first placed into the tank after flooding. If the tank inspection outlined below (or subsequent monitoring of the tank), indicates that the system has been comprised; **the system should be taken out of service** and repaired or replaced as necessary and an integrity test performed prior to again putting the system into operation.

LDEQ has established a contact telephone number to be used by contractors and citizens for reporting exigent conditions and for questions concerning problems with UST systems. This UST “hotline” will be manned by agency staff to assist the regulated community. The UST hotline number is (225) 219-3406 (LDEQ 5th floor receptionist). These procedures for contractors are being provided to tank owners, tank removal and installation contractors, response action contractors and trade groups that represent the industry such as Louisiana Oil Marketers Association and Louisiana Mid-Continent Oil and Gas Association. This information will also be posted on LDEQ’s Web Site.

General Evaluation Protocol for Contractors

No equipment should be turned on prior to examination. Check all electrical panels and make sure they are clean and dry. All equipment related to electric

power service should be inspected and any necessary repairs should be made prior to power restoration. This includes all fueling systems, leak-detection devices and corrosion prevention (impressed current) equipment. The electrical system should be checked for continuity and shorts (pumps, turbines, dispensers, ATG consoles, emergency shutoff, panel box, etc.)

Specifically, all electrical junction boxes and dispenser heads should be opened, inspected and dried if necessary. Conduits should be inspected for the presence of water, insulation damage, shorts or opens. Conduits exhibiting water should be dried or vacuumed as appropriate and all defective wiring should be replaced. To apply electrical power to a UST system before conducting basic examination could be extremely dangerous.

Submerged pumps and dispensers should not be operated if there is the possibility of water entering into the system as pumping water may damage hydraulic components.

Technical Protocol for Contractors

These protocols should be followed to place tanks back into service:

1. Stick tanks using water finding paste or read automatic tank gauge system, if operable, to determine whether water has entered the UST.
2. Flooded or water impacted tanks and all lines may need to be drained of water and dirt/mud or perhaps pumped dry and cleaned as conditions warrant. Liquids removed must be properly handled and disposed.
3. Interstitial spaces of tanks and lines of double walled systems, if flood-impacted, will need to be drained and flushed where possible. Blockage of interstitial spaces will render leak detection useless. Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Tanks with brine or vacuum interstitial sensors may be returned to service if brine or vacuum levels are normal. Be prepared to update damaged leak detection equipment after emergency conditions are abated.
4. All facility sumps, pans, and spill buckets need to be pumped dry and cleaned. Replace sump lid gaskets if applicable. If sump lids are missing, replace with new water tight lids. Replace sumps and spill buckets that fail to prevent water intrusion after initial cleaning and drying.
5. Check tank bottoms for water and debris. Remove and dispose as appropriate (see item #2 above).

6. Check deflection of fiberglass tanks. If deflection is greater than manufacturer's specification (general guideline is 2%) call the manufacturer for instruction.
7. If tanks shifted and problems are found, **repair or replace them** according to manufacturer's instructions and appropriate industry standards and regulations. Obviously, these **systems should be shut down and not receive fuel** until they are deemed safe for reuse (tightness tested).
8. Check vents for movement, cracking, blockage and proper operation.
9. Check dispenser filters and submersible check-valve screens for plugging with dirt or mud.
10. Flush dispensers and UST system if necessary. Collect fluids for proper disposal.
11. Check critical safety devices (e.g., emergency power off controls, line leak detectors, air compressor pressure limiters, shear valves, stop switches, isolation relays on dispensers, etc.) Shear valves may be salvaged if they can be cleaned and lubricated with corrosion preventative. Some will still have to be replaced.
12. Sump sensors may need to be replaced after emergency conditions cease.
13. In-tank pumps, Automatic Tank Gauge (ATG) probes, overfill devices, automatic line leak detectors, fill and vapor dust caps, etc. should be assessed. Assess their condition after cleaning and replace as necessary.
14. ATG consoles and any associated electronics that are not submerged, should have a programming and operability check performed by a certified technician after emergency conditions cease.
15. After emergency conditions are abated, submerged Corrosion Protection (CP) rectifiers and associated aboveground equipment protecting tanks and/or lines may have to be replaced. If not submersed have a National Association of Corrosion Engineers (NACE) certified professional perform an operability check of the equipment. Inspect CP lines in saw cuts for damage and replace as necessary. If CP systems are out of service for an extended period of time perform integrity assessment of affected component before placing CP system back into service. A NACE certified professional will be helpful assessing the CP system.
16. Check accessible fittings, valves and miscellaneous piping for damage and corrosion. Clean and replace as necessary.
17. Document all inspection, assessment and repair activities at each UST system site. Provide this information to the LDEQ in stand-alone report format within 90 days of initiation of operations of that UST facility.

18. Submerged dispensers will have to be replaced or repaired as necessary. This includes the hanging hardware. Any suction system dispensers will probably have flood impacted motors and pumps and may need complete replacement.

General Protocol Upon Resumption of Service:

Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Daily inventory control (with strict record keeping) may be the short-term leak detection method by necessity. Daily checks for water with water-finding paste should be done for several days until it has been determined that the system is tight. If these daily water checks indicate excessive water or the daily inventory control shows loss of product, **the tanks should be emptied of product and use of the tanks should cease**. Notification of these conditions should be made to the LDEQ UST hotline ((225) 219-3406) as soon as practical.

Post Start-Up Protocol for Contractors

This protocol should be followed once flood-impacted tanks have been placed back into service and emergency response and restoration have been completed or as otherwise directed by LDEQ:

Precision tightness test tanks, lines and interstitial spaces (after emergency conditions abate). Assess interstitial spaces for blockages, especially if used for leak detection. Decisions regarding replacement of tanks and lines should be made based on outcome of these tests. LDEQ field staff should be consulted on these decisions whenever possible. Cathodic protection systems should be checked to make sure they are connected and operational.

These actions are being delayed in an effort to expedite fuel delivery capabilities and due to unavailability of sufficient contractors to perform the otherwise required work in a timely manner. All leak detection equipment must be put back into operation as soon as practically possible or as directed by the LDEQ after the emergency has abated.

Other General Provisions for Owner/Operators and Contractors:

At flood-impacted sites, facilities will be allowed to salvage useable fuel in USTs by checking fuel for water and allow salvage of useable fuel. If flood water covered vent lines, displacement of fuel would have occurred and large volumes of water may exist in the affected USTs and require proper storage/disposal. This water should not be discharged to areas such as

streets, storm drains, sumps and ditches that are not permitted to receive these liquids.

Requirements for remediation of contaminated groundwater via approved corrective action plans in place prior to the Hurricane are suspended at UST sites in the parishes of Jefferson, Orleans, Plaquemines and St. Bernard unless otherwise directed by the LDEQ. However, LDEQ may require systems remediating free phased product to continue pumping operations.

Sites which have not experienced impacts from the Hurricane shall continue with routine remedial efforts and reporting (Unless RAC/consulting firm handling the remediation has been affected and displaced by the storm).

All facilities in which remedial efforts are temporarily suspended or delayed must provide notice to the LDEQ UST hotline (225) 219-3406 and provide written documentation as directed.

EVALUATION SCHEDULE

The evaluation of UST status should be initiated as soon as conditions allow flood area re-entry. Further testing will be performed once emergency conditions and major restoration efforts are complete and when sufficient contractors are available to perform the work. This further testing should be performed no later than six months after product was first placed into the tank after flooding.